FRIENDS OF GORDION

NEWSLETTER

Figure 1: The production of the opera "Midas' Ears" by the Turkish State Opera and Ballet at the Gordion Museum in mid-September. Photo by Zekeriya Utğu.

During our two-week field season in August of 2020 we optimistically assumed that in a year's time the world would have returned to a normal state, as would archaeology in general. Our knowledge of earlier pandemics should have taught us that history is not so straightforward or methodical, and consequently we spent each day of the 2021 season considering how we could achieve our research goals without endangering the health of the staff. Vaccinations, temperature checks, masks, hand sanitizer stations, and COVID tests at the regional hospital in Polatlı were once again standard safety features, although we were nevertheless able to conduct a regular-length season of 10 weeks with a staff usually ranging from 15 to 20, and fortunately everyone remained healthy. The season even closed with the performance of an opera, "Midas' Ears," that drew over 1,000 people to the Gordion Museum (fig. 1).

Nearly all of our fieldwork was focused on architectural conservation and research, with only limited excavation due to the pandemic: our main excavation supervisors are British, and the COVID variants there prompted the Turkish government to ban travel between Britain and Turkey. This was not a serious setback, however, because we have uncovered so many ancient buildings in the last seven years of digging that our conservators have had difficulty restoring them as fast as we find them, and by the end of the summer we had accomplished everything we set out to do.

Our focus was on Gordion's two

Figure 2: Conservation at the citadel's East Gate (9th century B.C.), looking west. Photo by Brian Rose.

Figure 3: Conservation of the East Gate's South Bastion, looking south (9th century B.C.). Photo by Brian Rose.

monumental citadel gates, the Early Phrygian East Gate (figs. 2, 3) and the multi-period South Gate (figs. 4–10), both of which were initially built in the mid 9th century B.C. The East Gate is the best-preserved Iron Age citadel gate in Asia Minor, still standing to a height of 10 m (nearly 33 ft.; figs. 2, 3). It was heavily damaged by an earthquake in 1999, and we devoted six seasons to the removal, consolidation, and repositioning of the heavily cracked stones on the gate's South Bastion. This conservation program was completed in 2019 with the exception of cracks in the lower stone masonry of the North and South Bastions, which this year we treated with epoxy. The earthquake had also dislodged many of the small "chinking" stones that the ancient Phrygian masons had placed in the interstices around the larger blocks to create even courses of stones. These too were reset into the walls of both the North and South Bastions.

The South Gate, which we have been excavating since 2013, presented a more challenging set of conservation problems (figs. 4–10). The gate was built ca. 850 B.C., refurbished in the 8th and 6th centuries B.C., and then rebuilt again in the 4th ca. A.D., so it was in operation for over 1,200 years. The approach road was over 65 m in length, making it the longest known approach road of any citadel gate in Asia Minor, and the fortification wall on the road's northern side still rises to a height of nearly 4.4 m.

In general, the defensive walls lining the gate's approach road have survived relatively well during the last 3,000 years, but one stretch was so badly damaged that our excavators were forced to leave a large rectangle of earth in front of it so that the stones would be protected until the

Figure 4: Winch moving the conserved stones of the citadel's South Gate (9th century B.C.) back to their original position, looking north. Photo by Zekeriya Utğu and Alican Kırcaali.

conservators had an opportunity to restore it. During the first week of the season we excavated this section of earth (measuring 6 x 4 m) and exposed the badly damaged wall behind it (figs. 5-7), where an earthquake in antiquity had caused most of the facing stones to collapse. The core of the wall was still preserved to a height of nearly 3 m, and conservation began immediately after the excavation ended and was completed by the end of the season.

One reason why the wall was so badly damaged is that Gordion's masons in the 9th century B.C. had placed rows of juniper logs between every three courses of stone, apparently to provide the wall with greater flexibility in the event of an earthquake. This measure works relatively well unless there is a war that results in the building catching fire, which is what happened when the Persians attacked Gordion ca. 540 B.C. This was a siege of unknown duration, but in the end, the Persians won. In the course of the conflict, however, the juniper logs caught fire and burned from end to end *within the wall*, which weakened the blocks around them, causing the facing stones to shear off during subsequent seismic activity. We have therefore done our best to repair the damage caused by the Persians 2,500 years ago.

Each of the missing courses of facing stones originally rose to a different height, so the leaders of the conservation project, Elisa del Bono and Angelo Lanza, initially needed to determine which of the fallen stones should be assigned to which course. Furthermore, each of the stones had to be consolidated before we repositioned them on the wall with the assistance of a crane (figs. 4, 7, 8). The restored facing courses were then anchored to the rubble core behind by steel straps, just as we have done previously at the citadel's East Gate (see *Friends of Gordion Newsletter 2018*: fig. 4). Altogether, 43 newly stabilized stones were assembled in 12 wall courses, and the northern side of the approach road is once again defined by the same handsome

Figure 5: The South Gate, looking north. The arrow indicates the section of earth excavated in 2021. The collapsed wall segment lies behind it. Photo by Brian Rose.

limestone facing it once possessed (figs. 9, 10). One can now perceive it more easily as the kind of monumental gate that the 9th century B.C. architects originally intended, through which Midas himself will have passed.

We also discovered that there are vertical offsets of ca. 0.15 m along the wall line, occurring at regular intervals of approximately 10 m, which is similar to the technique used for the Late Bronze Age fortification walls of Troy (ca. 14th century B.C.; figs. 9, 10). This is one of several similarities in material culture between Troy and Phrygia that we have observed, and it worth noting that Hecuba, the queen of Troy in the Homeric tales, was a Phrygian.

I should add that all of our conservation efforts conform to the Charter of Venice in 1964, which advises that modern interventions should be distinguishable from the

Figure 6: The South Gate, looking north, after the section of earth had been excavated. The arrow indicates the damaged section of the wall. Photo by Brian Rose.

Figure 7: Angelo Lanza and Nahit Yılmaz stabilizing the wall stones at the South Gate. The damaged section of the wall is behind them. Photo by Elisa del Bono.

surviving ancient masonry, but in a way that does not detract from the aesthetic appearance of the monument as a whole. Complying with such conservation guidelines is never easy, but the result is that the full biography of the monument is presented to the visitor: original construction, subsequent destruction, and contemporary reconstruction.

We also installed about 100 meters of new galvanized fencing along the visitor circuit on the western side of the citadel's Main Excavation Area (figs. 11, 12), and we renewed the "green caps" above the conserved walls of the 9th century B.C. Terrace Building or industrial district (fig. 13). This environmentally friendly system of conservation involves the placement of shallow-rooted *poa* plants above the stabilized walls; the roots absorb the excess water during the rainy season but do not grow deeply enough to disturb the integrity of the underlying masonry. The work was carried out by a group of local women who have been trained in this green-capping technique by Penn paleo-botanist Naomi Miller.

One final note on the connections between antiquity and the present. The end of the Early Phrygian citadel's East Gate coincided with a major conflagration that swept through the center of the settlement in ca. 800 B.C. Once thought to have been caused by an enemy attack, the fire now appears to have originated in Gordion's Terrace Building or industrial district, and it was quickly spread by the strong winds of late summer. Those same winds are still with us, and still playing a role in

Figure 8: Nahit Yılmaz, Angelo Lanza, and Alican Kırcaali moving a conserved wall stone back into its original position on the South Gate. Photo by Elisa del Bono.

spreading fires throughout the eastern Mediterranean, as demonstrated by the devastating blazes in Turkey and Greece this past summer which damaged several archaeological sites. In order to minimize the risk of further damage, the Ministry of Culture and Tourism advised us to remove any vegetation at the base of the Citadel Mound and the tumuli to prevent future fires from spreading (fig. 14). This was yet another reminder that the archaeological landscapes of Anatolia remain under threat from the same kind of disasters that their inhabitants faced 3,000 years ago.

The Laser Scanning of Tumulus MM ("Midas Mound")

We have long planned to scan the Tumulus MM tomb chamber so that we can produce a comprehensive and accurate record of the monument as well as a digital reconstruction of what it looked like in ca. 740 B.C., during the funeral of a man whom we identify as King Midas's father. Inside the chamber a wide variety of bronze objects had originally been suspended from iron spikes set into the walls, including belts, drinking bowls, serving jugs, ladles, and situlae (ornamental bucket-shaped vessels for beer or wine). However, after the iron spikes had corroded and broken off over the centuries, the bronze objects fell to the floor, where they were found at the time of excavation in 1957. Nevertheless, since the holes occupied by the iron spikes are still visible, as is the corrosion staining on the walls from contact with the suspended bronze objects, there is still enough evidence to allow for a complete reconstruction of the original layout of the grave assemblage, and for this work the laser scanning is essential.

In mid-July we began the fieldwork that would lead to such a reconstruction through the creation of a three-dimensional digital model. This was directed by a team from Koç University in Istanbul: Matthew Harpster, Hasan Bal, Michael Barngrover, and Günce Öçgüden. Using a FARO Focus S350 Plus laser scanner, the team was able to scan the chamber's interior in only two days. Günce Öçgüden conducted the scans, as only one person was allowed inside due to the fragility of the monument; this is, after all, the oldest standing wooden building in the world (figs. 15, 16). Much of the outer part of the chamber complex was also recorded, although the scanning of the roof will have to wait until next year.

The digital model will also be of great value to cultural heritage management, in that we will be able to monitor more effectively any deterioration that may occur over time. Furthermore, an

Figure 9: The newly conserved north wall of the South Gate (9th century B.C.). The arrows indicate the vertical offsets in the wall. The glacis is in the foreground. Photo by Brian Rose.

interactive tomb exhibition can be prepared by using virtual reality and augmented reality technology. In this way, Gordion's many visitors can tour the burial chamber for the first time, something that was impossible before because of the restricted access to the wooden chamber.

Object Conservation

Another conservation project of note involved one of the many enormous pithoi in the Gordion Museum courtyard (fig. 17). A pithos is a large ceramic vessel usually intended for the storage of wheat, barley, wine, or olive oil, and they often weighed as much as two tons or 1,800 kilos. Pithoi were generally set into the floor of a building, with only the mouth and shoulders left visible, so they tended not to move once they were installed. They were also remarkably versatile, in that with slight modification they could be used as coffins, chimneys, linings for wells, or containers for plants. A second millennium B.C. cemetery at Gordon contained at least 42 pithos burials varying in height from 1.10–1.60 m, and the North Bastion of the citadel's East Gate held as many as 53 pithoi set into the floor, thereby providing a high level of security for the citadel's food supply.

Pithoi displayed in museums today do not have the protection of a surrounding earthen floor to keep the sides from collapsing, and due to their pointed bases, they can only be held upright by a metal armature that often exerts additional pressure on their sides. One such pithos of Roman Imperial date, discovered 25 km northwest of Gordion, was in the process of collapsing after extensive surface damage, and conservator Murat Cura (Başkent Conservation Laboratory) developed a new technique to conserve it (fig. 18). The surface was first stabilized with a mortar created by mixing flaking pieces of the pithos with an araldite adhesive, after which the entire pithos was surrounded by a thick fiberglass shell to which metal clamps were attached at three different points

Figure 10: The newly conserved north wall and glacis of the South Gate (9th century B.C.). Photo by Brian Rose.

to facilitate lifting (fig. 17). Once it had been moved to a secure location and set in a stable frame, the fiberglass casing was removed, and the decorative shoulder band featuring a dotted wave pattern was cleaned. Serkan Pamuk of Akdeniz University in Antalya inaugurated a new study of these pithoi, which were used continually at Gordion over the course of more than two millennia (fig. 19).

Also on display at the Gordion Museum is the pebble mosaic from Megaron 2 (ca. 825 B.C.) on the Citadel Mound, the earliest known of its kind.

Figure 11: Alican Kırcaali with the line of the new fencing marked on the ground. The old barbed wire fence is visible in front of him. Photo by Elisa del Bono.

As part of his project to conserve and reconstruct this remarkably decorated floor, Dr. İbrahim Dural experimented with the creation of new mosaics that feature the same patterns as the originals, and with identical pebbles drawn from the same riverbanks (fig. 20). We will never be able to reinstall the original mosaic in Megaron 2, but it may be possible to do so with a facsimile, which would allow visitors to appreciate this extraordinary floor within its original architectural context.

Belkavak and Dümrek

The most important conservation project at the Gordion Museum this summer involved the reconstruction of the Belkavak tomb chamber, and curator Mustafa Metin of Ankara's Museum of Anatolian Civilizations kindly provides the following information. The chamber was originally part of a Hellenistic period tumulus near Dümrek, located nearly 25 km northwest of Gordion and lying on the west bank of the Sakarya River (fig. 21). The tumulus had been attacked in 2012 by looters who drove a bulldozer through the center of the mound in an effort to locate the chamber quickly. In so doing, they damaged the upper section of a well-preserved corbeled roof, although the majority of the chamber, dating to the 2nd or 1st century B.C., escaped destruction (see *Friends of Gordion Newsletter 2017*: 4–5).

A dromos or corridor led into an antechamber measuring 3 x 2.10 m, while the main chamber measured nearly 3 x 3 m. The same kind of corbeled roof with overlapping stone slabs is often found in other Hellenistic tombs from Galatia and in Bithynia

Figure 12: Installing the new galvanized fencing on Gordion's visitor circuit. Photo by Ömür Atiktığ.

(northwest Turkey). The tomb chamber lay in a remote location that was difficult to protect, and so after it had been drawn and the stones numbered, it was dismantled by the Museum of Anatolian Civilizations and transported to the Gordion Museum for conservation and reconstruction. The initial fieldwork was undertaken by Ankara Museum curator Vahap Kaya, who met an untimely death in 2016. Final conservation was carried out in the summer of 2021 by Mustafa Metin, Ömer Çokdoğan, Alirıza Çakır, and Ubeyd Çiftçi of the Ankara Museum, who returned the newly conserved blocks of the tomb chamber to their original position (fig. 22). You will see it in the museum garden near another Hellenistic tomb chamber of similar type, Tumulus O from the outskirts of Gordion, that had been excavated in 1955 by Rodney Young and similarly later moved to the museum for its preservation.

The attempted destruction of the Belkavak tumulus was not the only violence to have occurred recently in this region. Only a few kilometers away (ca. 33 km northwest of Gordion), lay the sacred site of Dümrek, which held a series of rock-cut shrines probably dedicated to Matar, the Phrygian mother goddess whom the Greeks and Romans would subsequently worship as Cybele. Within the site there were originally at least ten elevated thrones with semicircular backs that were each approached by a short flight of steps (fig. 23). These were points of intersection between human and divine, and are often referred to as "empty thrones," representing the power of a spiritual being who is not physically manifest. The same empty throne motif was commonly used in later monuments to both Cybele and Christ, and it also figures prominently in the design of the Oklahoma City Memorial commemorating the lives lost during the 1994 bombing. This idea appears to have started in Phrygia in the 8th century B.C., perhaps during the reign of King Midas.

The Dümrek thrones are monuments carved from the living rock, and as such, they never served as receptacles for objects, precious or otherwise. Nevertheless, the local plunderers evidently believed that a treasure was somehow secreted within the monuments, so they blew up several of the thrones with dynamite in an attempt to find it (fig. 24). Such deliberate destruction of cultural property is difficult for all of us to understand, especially when the motives underlying that destruction are so senseless, and it highlights the pressing need to educate the local community about cultural heritage protection, especially the younger generation.

Figure 13: Preparing the "green caps" to be placed above the conserved walls of the 9th century B.C. Terrace Building. Photo by Brian Rose.

UNESCO and the World Heritage List of Historic Sites

As I mentioned last year, one of our most important projects involves Turkey's application to UNESCO for Gordion's inscription on the List of World Heritage Sites, which would officially recognize Gordion's unique cultural and archaeological significance. There are only 19 such sites in Turkey, and the designation would help immeasurably in protecting Gordion and the more than 125 tumuli that surround it. We completed the nearly 300-page nomination file in the fall of 2020 in tandem with the Department of World Heritage Sites in the General Directorate of Cultural Heritage and Museums, a division of the Turkish Ministry of Culture and Tourism.

The onsite evaluation took place in early August over the course of four days, in which we toured the proposed site protection zone with members of UNESCO, Turkey-ICOMOS (International Council on Monuments and Sites), and the Cultural Ministry's Department of World Heritage Sites (fig. 25). The expert sent by UNESCO was Dr. Cynthia Dunning Thierstein of Archaeoconcept in Switzerland, who queried us on everything from strategic planning to conservation philosophy to accessibility plans for the handicapped. In a way, it was like taking doctoral exams, but the discussions certainly helped us to sharpen our objectives and consider a new set of initiatives that will make the site more appealing and accessible to visitors.

Figure 14: Removing vegetation at the base of the Midas Mound (Tumulus MM) in August to prevent potential fires from spreading. Photo by Günsel Özbilen Güngör.

A full day of lectures presented by the Gordion team and the Ministry's Cultural Heritage Department was followed by an in-depth tour of the Citadel Mound, Tumulus MM, and the Gordion Museum, as well as the ancient residential districts in the Lower and Outer Towns plus the tumuli surrounding the site. During one afternoon the entire group interviewed two households in Yassıhöyük, the modern village at Gordion, about the residents' attitudes toward the ancient site and the surrounding tumuli. These interviews were especially important to us since the local farmers have been plowing increasingly larger destructive tracts around the tumuli. Figure 26 shows the base of Tumulus W (ca. 850 B.C.), the oldest tumulus in Anatolia, around which a 40 m tract has been plowed, and most of its neighbors look the same. The problem is that most of the tumuli lie within the boundaries of privately-owned farms, so any solution regarding their protection will have to be negotiated jointly by the farmers, the Cultural Ministry, and the Gordion Project. In the end, the evaluation was a positive experience for everyone involved, and we are cautiously optimistic about Gordion's addition to UNESCO's World Heritage List.

Gordion's Roman Road

The 2021 inspection for the Gordion UNESCO World Heritage application required firsthand examination of the many tumuli and other ancient monuments situated within the designated "Buffer Zone" that surrounds our excavation permit area. It was during the course of this inspection that a number of valuable observations were made by Gareth Darbyshire (Penn Museum) and And Atasoy (Ankara Koruma Kurulu/ Conservation Directorate). Of particular note is their confirmation of the existence and extensive survival of the main east-west Roman military highway between Ankara and points west, in the uplands on the western side of the Sakarya valley.

The road still survives on the modern surface as a 6–7 m wide ribbon of pebbles extending in a near straight line for many miles, running northeast down the western side of the valley directly to Gordion's Outer Town area (fig. 27), and southwest to the horizon, heading directly for the mountain at Sivrihisar located ca. 50 km away. On the opposite eastern side of the Sakarya valley, heading for Ankara, the road continues east ca. 12 km, passing the landmark Beyceğiz tumulus that was jointly excavated by the Museum of Anatolian Civilisations and the Gordion Project in 2017 (see *Friends of Gordion Newsletter 2018*, pp. 14–15).

At Gordion itself, short stretches of this road had already been excavated by our project as early as the 1950s

Figure 15: Günce Öçgüden preparing to scan the interior of the Tumulus MM tomb chamber. Photo by Michael Barngrover.

Figure 16: Scan of the interior of the Tumulus MM tomb chamber, ca. 740 B.C. Photo by Michael Barngrover.

Figure 17: Osman Ekinci raising the Roman pithos (large ceramic storage vessel) during conservation at the Gordion Museum. Photo by Brian Rose.

(fig. 27, inset), and although no closely datable artifacts were found to date the road's construction, it is typologically and unquestionably Roman, with a stone curb and gutter on either side. Milestone evidence from elsewhere in the region indicates that a major highway upgrade project was first undertaken by the Roman authorities in AD 80–81, about a century after the Roman takeover of the area, so the road was presumably built then, with later periodic upgrades. It certainly continued in use into the early 5th century AD, as indicated by a Late Roman coin found on its surface.

Although the extant road fabric is Roman, it is surely the case that the general route is far older, in all likelihood at least as old as the Bronze Age Hittite kingdom (17th – 12th century B.C.). For travellers approaching Phrygian Gordion from the west along this route in the era of King Midas, around 700 B.C., their first glimpse of the site would have been Tumulus MM, dominating the viewshed and dwarfing the city at its feet, just as it does the modern village today.

The Pre-Roman Cemetery in the Lower Town

There has been only limited excavation to the south of Gordion's citadel in the Lower Town's residential district (fig. 27), but it produced an abundance of material regarding life and death in the 4th and 3rd centuries B.C., as well as a Roman cemetery of the 1st – 2nd century A.D. Among the most significant discoveries were a series of burials near the large 6th century B.C. fort of Küçük Höyük, where buildings of Middle and Late Phrygian date (8th – 5th century B.C.) had once existed. When did these burials date, what prompted the transition from settlement to cemetery, and to what extent can the burials be connected to occupation by the Celts or Galatians in the third century B.C.?

In order to address these issues, Tuğba Gençer (Istanbul University, Cerrahpaşa), assisted by her colleague Burkay Çamurdan (a trauma and orthopedic specialist), continued her forensic and osteological re-examination of the 21 pre-Roman human skeletons that had been excavated by Mary Voigt over 25 years ago (fig. 28). Gareth Darbyshire (Penn Museum) examined the relevant archaeological and historical aspects of this material in anticipation of further excavations that we hope to carry out in 2022.

The most reliably dated burial is the inhumation of a young woman who died between the ages of 16 and 22 and was laid to rest in a wooden coffin with iron fittings. She wore a pair of lion-head gold earrings of a type belonging to the late 4th – early 2nd century B.C., as found in Hellenistic Thracian and Celtic contexts in the Balkans, including royal tumulus burials. We can conclude that she was from a family of some wealth and social status (though not elevated enough to qualify for a tumulus burial), and there is also a very high possibility that she was buried here during the Galatian period, in the 3rd century B.C. Future aDNA and isotope analysis will help ascertain whether she was of longstanding local Anatolian stock, or was biologically connected to the more recent Macedonian or Galatian intruders from Europe.

Only a few meters to the west, however, there were a number of other burials very different in character and status, and perhaps in date also. These include the formal inhumations of three females with the body laid on the right side in a flexed position and accompanied by simple grave goods. Two of these females were of a similar age to the woman with the gold earrings, but the other was much older, 50+ years. One of the younger women (YH 38815) had died from a broken neck, though whether this was the result of an accident or human violence is unverifiable; the cause of death of the other two is unknown. Andrea Berlin (Boston University) has previously established that the associated ceramics, very modest in character, were of a type datable no later than the 4th century B.C.

In the same area were the remains of two males aged 30–45 years, who had evidently been killed on the spot and their bodies left where they had dropped. One of the men had received two fatal blows to the head, the other a fatal blow to the back of the neck. From their bones, Gençer has drawn a number of further conclusions: the similar morphology of their mandibles strongly suggests that the two men were related, perhaps brothers (future aDNA analysis will help here), and both of them had teeth that were deformed by using them as tools for work. One of the men certainly suffered from rheumatoid arthritis, and had osteophytic developments on his right hand and knee that caused him to limp with his right leg. Using a cast

Figure 18: Conservator Murat Cura removing the fiberglass shell from the Roman pithos during conservation. Photo by Osman Ekinci.

Figure 19: Günsel Özbilen Güngör and Serkan Pamuk drawing a pithos in the Gordion Museum depot. Photo by Brian Rose.

Figure 20: İbrahim Dural creating new pebble mosaics that feature the same patterns as the Megaron 2 originals. Photo by Brian Rose.

of this man's skull (YH 37177), Gençer began a facial reconstruction which she completed after the 2021 season, at Istanbul University (fig. 28, inset). It is impossible to be certain whether these two men were the victims of a purely judicial punishment, or even murder, or of something else such as an overtly sacrificial ritual in accordance with Galatian religious beliefs. Recent aDNA analyses of several of these individuals by Ankara's Middle East Technical University point to their local Anatolian descent rather than any recent European origin.

Approximately 100 m to the west of this area were the remains of a very different mode of burial. This took the form of human and animal bone deposited in discrete clusters only a few meters apart, and laid out either on the open-air ground surface or perhaps buried in pits, with no clear evidence for associated grave goods. In no case was there a complete skeleton present, and the condition of the bones indicates that the decedents had first been excarnated and then the bones of particular body parts had been selected and carefully redeposited in varying configurations (fig. 28, on table at right).

In some cases the clumps were small. One featured the skull of a man aged 26–32 years; another held the skull of a 15–17-year old female and the pelvis of a male in his mid-thirties, together with a few animal body parts. Yet another, with the partial remains of three people, was more complex: a child of around six years old, a woman in her later thirties, and a man in his early forties were mixed with over 2,000 animal bones from horses, sheep/goats, pigs, cows, and asses. Despite earlier claims that several of the bodies in this area had been beheaded, there is no osteological evidence for decapitation

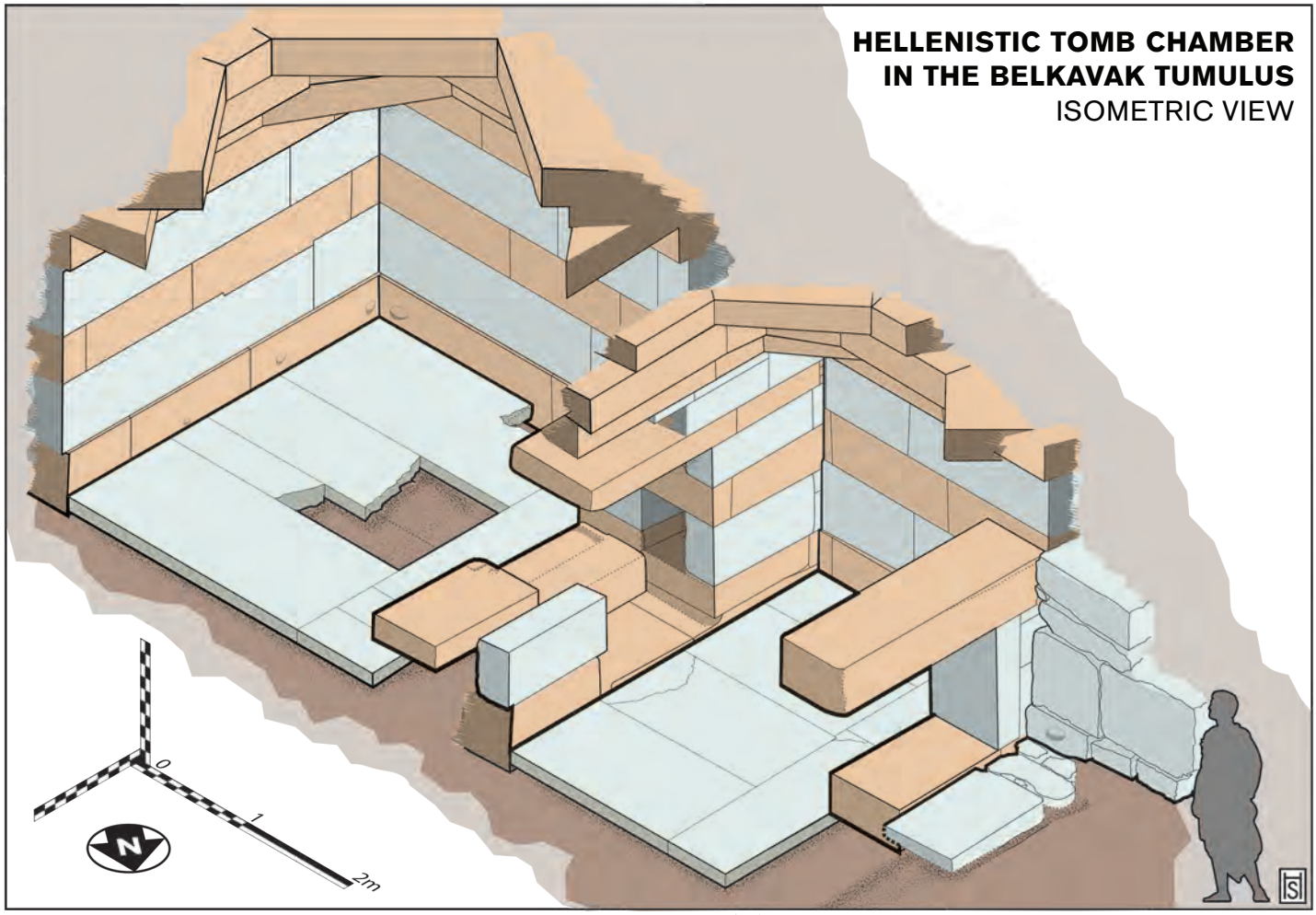

Figure 21: Isometric drawing of the Hellenistic tomb chamber in the Belkavak Tumulus. Measured and drawn by Sam Holzman.

and the causes of their deaths remain unknown. One of the men, however, had suffered a fatal perimortem fracture to his femur caused by some violent blow, and the teenage female in Bone Cluster 4 had received severe trauma to the neck which eventually led to her death.

Although closely datable artifactual evidence for these deposits is not apparent, the burials are generically similar to those found across much of Celtic Europe as far west as the British Isles. Furthermore, there are no known parallels for such burials in earlier contexts in or around Gordion, so the burials seem likely to be testimony of Galatian religious beliefs and mortuary customs introduced to the region in the 3rd century B.C., as Mary Voigt and Page Selinsky have suggested.

Gordion's Cultural Heritage Education Program (CHEP): July 6–26, 2021

This season marked the seventh year of the CHEP Program, which has been directed by Ayşe Gürsan-Salzmann (Penn Museum) in tandem with Halil Demirdelen (Ankara Ethnographic Museum) since 2014 (figs. 29, 30). The program's main goal is to inform and educate people of local village communities, high school students, teachers, and members of the local municipal government about the historical and humanistic values of the Gordion region. We have consequently reached out to a large group of both elementary and high school students and teachers, as well as government administrators. The local students' families are often farmers who make a living in agropastoral activities, not unlike their ancestors in and around ancient Gordion, and we need them to play a critical role in protecting and preserving the ancient landscape.

The program started with an orientation for 21 participants, of which

Figure 22: The team from the Museum of Anatolian Civilizations in Ankara completing the reconstruction of the Belkavak tomb chamber next to the Gordion Museum. Photo by Mustafa Metin.

14 were high school graduates, two were regional directors of historic tours, and two were high school principals. We presented in detail the methods used to stabilize and reconstruct the stone masonry of Gordion's monumental Citadel Gates, along with the strategic use of local plants in conservation activities. The program included six full days of travel on buses and in taxis to different cities and provinces to visit historic sites of different periods, including Phrygian monuments, historic Seljuk period mosques and Christian churches, and museums of archaeology, ethnography, and modern art. Many of the participants are from the Polatlı township, so it was especially exciting for them to see and tour the historic site of the pivotal Battle of the Sakarya River, fought around Gordion in 1921 during the Turkish Independence War. As in the past, the program included an environmental component to familiarize participants with the endemic plants and trees in the region and to explain the importance of maintaining an ecological balance.

The last day of the program is generally set aside for discussion and feedback followed by the distribution of certificates. The response that we received from the students was especially encouraging, and I repeat here a few of their comments: "I realized the importance of the preservation of landscape, especially in the case of historic sites such as Gordion." "The Museum visits with expert guides really brought the objects and their creators back to life." "This program taught me the history of *my* home, and showed me

how important it is for me to enlist my friends and family in the preservation of our history and its monuments." "Today we visited two beautifully restored buildings of prayer: a 19th century Armenian church and an 18th century Seljuk mosque in Sivrihisar. The church was empty; the mosque was full of people. I realized that there was a time when people lived side by side irrespective of race, religion, and language. Can we re-create such respect among all people?"

We look forward to continuing the CHEP Project in the future, as it has proven to be an enriching educational experience for local people who are the ultimate stakeholders in Gordion's preservation.

Figure 23: Brendan Burke in 1999, standing next to a rock-cut shrine probably dedicated to Matar, the Phrygian mother goddess, at Dümrek, ca. 33 km northwest of Gordion. Photo by Brendan Burke.

Outreach and Tourism Development

We are working with the Museum of Anatolian Civilizations in Ankara to bring an increasingly diverse range of public programs to Gordion so that a larger audience can witness the newly excavated and conserved monuments on the Citadel Mound. One of the more distinctive offerings was an opera entitled "Midas' Ears" that premiered at the Gordion Museum in mid-September (fig. 1). This was written by Turkish composer Ferit Tüzün, and focuses on the legend wherein Midas, Gordion's most famous king, judged a musical contest between Apollo and the satyr Marsyas. After having chosen Marsyas as the winner, Apollo reportedly turned Midas' ears into those of a donkey as a sign of his foolishness.

The performance occurred in the grounds of the Gordion Museum, near the reconstructed Belkavak tomb chamber, and drew an audience of

Figure 24: The same rock-cut shrine at Dümrek in 2021, after looters had dynamited it. The arrows indicate the shrine fragments. Photo by Brian Rose.

Figure 25: The UNESCO and ICOMOS team touring the Citadel Mound with excavation director Brian Rose. Photo by Zekeriya Utğu.

Figure 26: The plowed perimeter of Tumulus W, the oldest burial mound in Asia Minor (ca. 850 B.C.). Photo by Brian Rose.

nearly 1,100. Those in attendance included the Deputy Minister of Culture and Tourism, Özgül Özkan Yavuz; the ambassadors from Bulgaria, Japan, Kenya, Kyrgyzstan, the Philippines, Sudan, and Uzbekistan; the director of the Museum of Anatolian Civilizations, Yusuf Kıraç; and the director of the Ankara Cultural Ministry, Ali Ayvazoğlu, among many others. The performance was directed by Murat Karahan, and was staged by the Turkish State Opera and Ballet. We express our thanks to all of them for their willingness to consider us as an appropriate venue, and we hope to repeat the opera as a regular event given its popularity this year.

This is one of several outreach programs that we and our partners have organized during the last decade, always with a focus on the local community. The Gordion staff is in residence at the site for only 10–11 weeks each year, which means that we need to rely heavily on the local residents in the nearby town of Polatlı, and Yassıhöyük village where Gordion is located, to protect the surviving ancient remains. As mentioned above, Gordion's Deputy Director, Ayşe Gürsan-Salzmann, pioneered the CHEP program to educate the children of the region in ancient history and cultural heritage protection, and over the past seven years it has had a profound effect on the local community's understanding of the importance of preserving the archaeological site. It has also enabled the excavation team to form partnerships with the local educators of Polatlı, who now incorporate lessons on Phrygian history and archaeology into their classes.

This education program also enabled the excavation team to establish a strong connection with

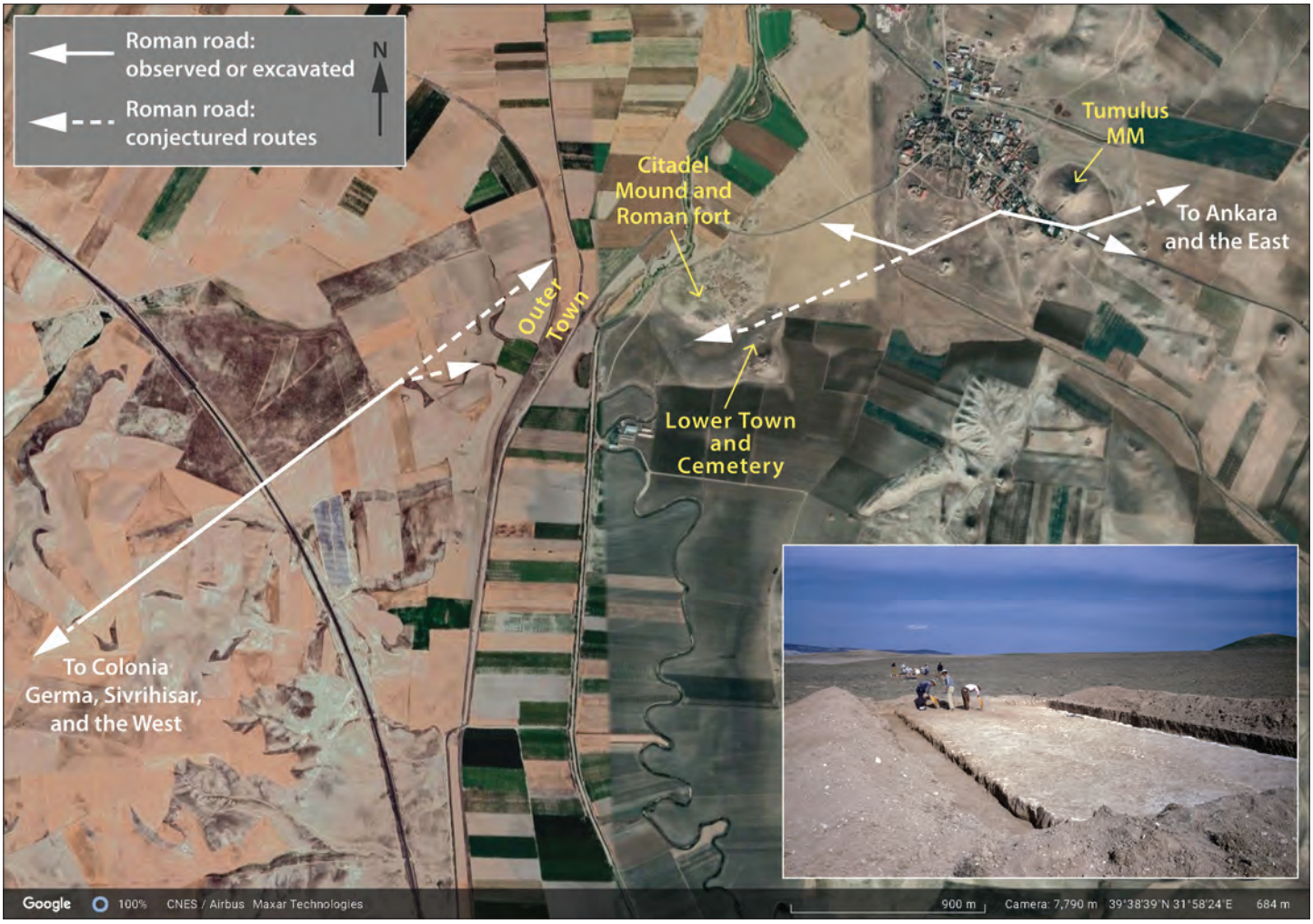

Figure 27: Map of the Roman Road at Gordion. The inset shows the Gordion Project excavating a stretch of the road in 1956. Map prepared by Gareth Darbyshire and Ardeth Anderson. Satellite image courtesy of Google Earth.

the local municipality or Belediye in Polatlı, a city of over 100,000 that lies 18 km to the southeast of Gordion. The cultural heritage department of the Polatlı municipality now participates in Gordion's cultural heritage programs, and is publishing our new archaeological site guidebook in Turkish, which will be distributed without cost to the local residents. An annual festival in commemoration of Midas, Phrygia's most famous king, is being developed in tandem with Ankara's Museum of Anatolian Civilizations, and will take place at the site each June. The Polatlı municipality also sponsors a widely celebrated race at Gordion every August, the Gordion Half-Marathon, which draws a large number of visitors to both the archaeological site and the local museum.

Publication, Staffing, and Notable Visitors

Our work during the 2021 season was made easier due to the energetic support of our representative, Ms. Bahar Hasırcı of the Museum of Anatolian Civilizations in Ankara. We also benefited tremendously this year from the periodic visits of Mr. Yusuf Kıraç and Mr. Umut Alagöz, the Director and Deputy Director, respectively, of the Museum of Anatolian Civilizations, Mr. Ali Ayvazoğlu, the director of Ankara's Culture and Tourism Directorate, and his associate Ms. Berna Görgün, and Mr. And Atasoy of the Ankara Koruma Kurulu (Conservation Directorate). We extend warm thanks to the General Directorate for Cultural Heritage and Museums, especially Mr. Gökhan Yazgı, General Director, Mr. Köksal Özköklü, Mr. Umut Görgülü, and Ms. Nihal Metin.

Figure 28: Tuğba Gençer conducting a forensic and osteological examination of the pre-Roman human skeletons from Gordion's Lower Town. Her 2021 facial reconstruction of skull YH 37177 is shown in the inset. Three stages of the facial reconstruction of another individual (YH 47397), made in 2016 and 2021, are visible on the table in the main photograph.
Photos by Brian Rose and Tuğba Gençer.

Equally generous in their assistance were the Kaymakam and Belediye Başkanı of Polatlı, Mr. Murat Bulacak and Mr. Mürsel Yıldızkaya, respectively. Mr. Kadim Koç, deputy director of the Polatlı Municipality, has been a constant source of support for us. Furthermore, he coordinated all of the food and travel arrangements during the week-long UNESCO evaluation in August, and is handling the printing of the new Turkish-language Gordion guidebook. That the UNESCO visit proceeded so smoothly was due to the tireless efforts of the Department of World Heritage Sites within the Turkish Ministry of Culture and Tourism, and especially to Ms. Zeynep Tuna Yüncü, Ms. Pınar Kuşseven, and Mr. Yıldırım İnan. We were also honored by the visits of Mr. Jeffrey Hovenier, U.S. Embassy Deputy Chief of Mission, and Ms. Jayne Howell, Consul General at the U.S. Embassy.

The excavation house was filled with researchers working on a wide variety of manuscripts that spanned a period from the Bronze Age through the Roman period (fig. 31). These included Gareth Darbyshire (iron objects, especially those from the cremation burials); Penn graduate student Brigitte Keslinke (Hellenistic ceramics and Late Phrygian architectural terracottas); Tuğba Gençer and her colleague from Istanbul University (Cerrahpaşa) Vedat Burkay Çamurdan (human skeletal material); Canan Çakırlar (zooarchaeological analysis); Billur Tekkök Karaöz and Ali Akın Akyol (Roman ceramics); Yusuf Kadıoğlu (Gordion's geology), Günsel Özbilen Güngör (lamps); and Rostislav Oreshko (Phrygian graffiti), assisted by Bariş Murat Kaya (Istanbul University).

The pace of publication is also steadily increasing. The Gordion monographs appearing this year include Phoebe Sheftel's *Bone and Ivory Objects from Gordion*; Gül Gürtekin Demir's study of the Lydian pottery from Gordion, *Lydian Painted Pottery Abroad*; and the *Gordion Cremation Tumuli* by Ellen Kohler and Beth Dusinberre, with contributions by Gareth Darbyshire and Jane Hickman. Three others are nearly complete: *The Hellenistic Settlement at Gordion* by Shannan Stewart and Martin Wells; Janet Jones' volume on the glass of Gordion; and a volume of collected studies on Middle and Late Phrygian Gordion. The first issue of *Hesperia* this year also included an article by Brian Rose, entitled "Midas, Matar, and Homer at Gordion and Midas City," which discusses the appearance of the citadel's megarons during the reign of Midas as well as their connection to the Midas Monument at Midas City.

We want to single out several members of the staff without whom this summer's work could not have functioned as well as it did: Günsel Özbilen Güngör, illustrator; Canan Çakırlar (Groeningen University), zooarchaeological analysis; Edibe Özmen Baysal (Hacettepe University), archaeobotany; Billur Tekkök Karaöz, Deniz Tamer and Ebru Kırkanlı (Başkent University), and Tuana Zara Eren (Ege University), ceramic analysis; Serkan Pamuk (Akdeniz University), pithos project; Ayse Gürsan-Salzmann (Penn) co-directed the Cultural Heritage Education Project (CHEP) with Mr. Halil Demirdelen (Curator of the Ethnographic Museum in Ankara), and

they were assisted by Bedirhan Demirel (Başkent University). The excavation of the South Gate approach road in Area 1 was supervised by Mehmetcan Soyluoğlu (Cyprus Institute) with the assistance of Alican Kırcaali (Samsun University). Ayşe Gürsan-Salzmann and Günsel Özbilen Güngör served as deputy directors, and Gareth Darbyshire (Penn Museum) as archivist.

The architectural conservation was overseen by Elisa Del Bono, Angelo Lanza, Giuseppe Bomba, and Mauro Perrone, assisted by Alican Kırcaali (Samsun University) and Mehmetcan Soyluoğlu (Cyprus Institute). The object conservation work was expertly overseen by Murat Cura (Başkent Konservasyon Laboratuvarı) and H. İbrahim Dural (Gazi University). The digital imaging of the Tumulus MM tomb chamber and the East Gate was conducted by Matthew Harpster, Michael Barngrover, Günce Pelin Öçgüden, and Hasan Bal (Koç University), and drone photography was supervised by Alican Kırcaali and Zekeriya Utğu, our house manager and guard. Zekeriya kept everything running efficiently within the excavation compound and on the Citadel Mound. Finally, although she was not a member of the Gordion staff in Turkey, Ardeth Anderson of the Penn Museum is responsible for the design and layout of each Gordion newsletter, and she also deserves our heartfelt thanks.

Figure 29: Gordion's Cultural Heritage Education Program at Ankara's Altınköy Open Air Museum, featuring lectures by Halil Demirdelen and Ayşe Gürsan-Salzmann. Photo by Bedirhan Demirel.

Figure 30: Gordion's Cultural Heritage Education Program visiting the Kale (fortress) of Ankara. Photo by Bedirhan Demirel.

Within the U.S., we continually rely on the counsel, guidance, and support of Charles K. Williams II, as well as Christopher Woods, the Williams Director of the Penn Museum, Amanda Mitchell-Boyask, executive director of advancement at the Penn Museum, and the Museum's Board of Overseers.

We would like to close by noting again that none of our accomplishments this summer would have been possible without your encouragement and generous support. It is a pleasure to acknowledge, in particular, the assistance offered to us by the Penn Museum of Archaeology and Anthropology, the C.K. Williams II Foundation, the U.S. Embassy in Ankara, the Merops Foundation, the Selz Foundation, the Areté Foundation, and Matthew J. Storm, C94, WG00, and Natalia Arias Storm. At this particular time, when so much cultural heritage has been disappearing so rapidly, we're enormously grateful for

Figure 31: The 2021 Gordion Project team. Photo by Bedirhan Demirel.

the investment that you've made in the preservation of the past.

We hope to be able to share our results with more of you during this year, at lectures in the U.S. or at Gordion itself. You'll find the latest information about the project on our website:

https://www.penn.museum/sites/gordion/

We look forward to welcoming you to the site in a post-pandemic era!

With best wishes,

C. Brian Rose
James B. Pritchard Professor of Archaeology, Penn Museum
Director, Gordion Archaeological Project

Ayşe Gürsan-Salzmann
Penn Museum
Assistant Director, Gordion Archaeological Project

The Friends of Gordion support the ongoing activities of the Gordion Excavation Project, which include site conservation, fieldwork, and publications of the latest discoveries. All Friends of Gordion receive the annual newsletter that provides information about the results of the season's work. Friends are especially welcome at Gordion and are given guided tours of the site, the excavation, and the museum. Every contribution, no matter how small, enables us to further the cause of protecting and publicizing the site. You can support Gordion by making your tax deductible donation at

https://www.penn.museum/sites/gordion/friends-of-gordion/